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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,512	05/24/2000	Hoon Chang	678-494(P9201)	6378

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Paul J Farrell  
Dilworth & Barrese  
333 Earle Ovington Blvd  
Uniondale, NY 11553

EXAMINER

NGUYEN, TOAN D

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/577,512

Applicant(s)

CHANG ET AL.

Examiner

Toan D Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Cheng et al. (U.S. Patent 6,226,301 B1).

For claim 1, Cheng et al. disclose method and apparatus for segmentation and assembly of data frames for retransmission in a telecommunications system comprising the steps of:

providing a frame sequence number 306 of a requested frame 300 to each of said data segments (figure 3, col. 7 lines 56-63);

providing a byte number corresponding to a start byte of each data segment to each of said data segments (col. 2 lines 39-44);

providing an indicator indicating whether or not each data segment is the last segment to each of said data segments (col. 2 lines 39-44 and col. 11 lines 19-24); and

providing a data stream to each of said data segments (figure 6, col. 8 line 66 to col. 9 line 14).

For claim 2, Cheng et al. disclose method and apparatus for segmentation and assembly of data frames for retransmission in a telecommunications system comprising the steps of:

a forward resequencing buffer 24 for storing data streams of transmitted frames together

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with associated frame sequence numbers, and for retransmitting requested frames (figure 1, col. 6 line 58 to col. 7 line 3);

a first register for storing a frame sequence number 306 indicating a retransmission requested frame 300 (figure 3, col. 7 lines 56-63);

a second register for storing a byte sequence number indicating a start byte of frame segment obtained by segmenting a data stream of the retransmission-requested frame into a transmittable size (col. 2 lines 39-44 and col. 5 lines 17-61); and

a controller 18 for reading the data stream in the retransmission-requested frame from the forward resequencing buffer 24 (figure 1, col. 6 line 58 to col. 7 line 15), segmenting the read data stream into frame segments of the transmittable size (col. 5 lines 17-61 and col. col. 7 lines 56-63), and adding the frame sequence number and the byte sequence number corresponding to a start byte of each frame segment to each frame segment before transmission (figures 4 and 5B, col. 8 lines 12-27 and col. 8 lines 46-65).

For claim 3, Cheng et al. disclose wherein the controller 18 adds an indicator to each frame segment indicating whether each frame segment is the last frame segment of the retransmission-requested frame (col. 2 lines 39-44 and col. 8 lines 12-27).

For claim 4, Cheng et al. disclose wherein the controller 18 adds to each frame segment information indicating a size of each frame segment (figure 4, col. 8 lines 12-27).

For claim 5, Cheng et al. disclose method and apparatus for segmentation and assembly of data frames for retransmission in a telecommunications system comprising the steps of:

a) sending a retransmission request for a frame that failed to be received (col. 4 lines 35-37);

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b) receiving one or more frame segments, said frame segments resulting from segmenting the retransmission-requested frame (col. 4 lines 42-45 and col. 4 lines 48-52);

c) determining whether the one or more frame segments are from the retransmission-requested frame, depending on a frame sequence number included in the one or more frame segments (figure 3, col. 7 line 56 to col. 8 line 8),

d) examining byte sequence numbers of the data stream included in the one or more frame segments, when the one or more frame segments are the retransmission-requested frames (figure 5B, col. 8 lines 57-64);

e) repeating the steps c) and d), until it is determined that the last frame segment out of the frame segments is received (figure 6, col. 11 lines 19-24); and

f) arranging normally received frames and the frame segments according to the sequence numbers (figure 5B, col. 8 lines 46-64).

For claim 6, Cheng et al. disclose method and apparatus for segmentation and assembly of data frames for retransmission in a telecommunications system comprising the steps of:

segmenting data within the data frame into one or more data segments (figure 3, col. 7 lines 56-63);

placing each of the one or more data segments in a corresponding frame segment (figure 3, col. 7 lines 56-63);

providing a frame sequence number 306 of the data frame 300 to each of the frame segments (figure 3, col. 7 lines 59-60 and col. 8 lines 2-4);

providing a byte number corresponding to a start byte of each of the one or more data

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segment to the frame segment containing the corresponding data segment (col. 2 lines 39-44);  
and

providing an indicator in each frame segment, said indicator indicating whether the data segment in the frame segment is the last data segment of the one or more data segments of the data frame (col. 2 lines 39-44 and col. 11 lines 19-24).

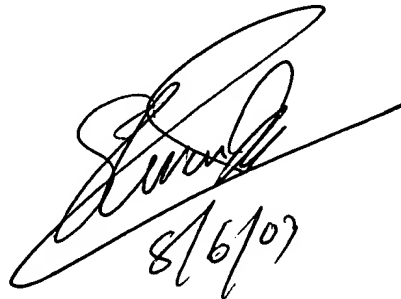
***Contact Information***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D Nguyen whose telephone number is 703-305-0140. The examiner can normally be reached on Monday- Friday (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 703-308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

TN  
T.N.

A handwritten signature in black ink, followed by the date 8/6/07 written below it.